

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-75-AD; Amendment 39-11816; AD 2000-14-07]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 727 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects information in an existing airworthiness directive (AD) that applies to certain Boeing Model 727 series airplanes. That AD supersedes an earlier airworthiness directive to require repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section; repair, if necessary; and modification of the rear spar web. This document corrects the effective date of the earlier, superseded AD, which was stated incorrectly in the existing AD. This correction is necessary to ensure that operators are advised of the correct effective date of the original AD, specifically as it affects the compliance time for a certain paragraph of this AD.

DATES: Effective August 17, 2000.

The incorporation by reference of Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999, as listed in the regulations, was approved previously by the Director of the Federal Register as of August 17, 2000 (65 FR 43228, July 13, 2000).

The incorporation by reference of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, as listed in the regulations, was approved previously by the Director of the Federal Register as of December 29, 1997 (62 FR 65355, December 12, 1997).

FOR FURTHER INFORMATION CONTACT: Walter Sippel, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2774; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: On July 3, 2000, the Federal Aviation Administration (FAA) issued AD 2000-14-07, amendment 39-11816 (65 FR 43228, July 13, 2000), which applies to certain Boeing Model 727 series airplanes. That AD supersedes an earlier airworthiness directive, AD 97-25-15, amendment 39-10239 (62 FR 65355, December 12, 1997), to require repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section; repair, if necessary; and modification of the rear spar web. That AD was prompted by several reports of fuel leakage due to cracking of the rear spar web of the wing center section. The actions required by that AD are

intended to prevent cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and could result in an electrical short that could cause a fire.

Need for the Correction

The FAA has found that the effective date associated with the earlier, superseded AD (AD 97-25-15) was stated incorrectly in paragraph (a) of AD 2000-14-07. The compliance time in paragraph (a) of AD 2000-14-07, which is a restatement of paragraph (a) of AD 97-25-15, reads, "Prior to the accumulation of 15,000 total flight cycles, or within 300 flight cycles after December 27, 1997 (the effective date of AD 97-25-15, amendment 39-10239), whichever occurs later." The correct effective date of AD 97-25-15 is December 29, 1997.

The FAA has determined that a correction to AD 2000-14-07 is necessary. The correction will ensure that operators are advised of the correct effective date of the original AD, particularly as it affects the compliance time for paragraph (a) of the AD.

Explanation of Additional Error

In AD 2000-14-07, Item 2. under the section "Adoption of the Amendment" reads, "Section 39.13 is amended by removing amendment 39-10239 (62 FR 65355, December 29, 1997)." The referenced date should be December 12, 1997, which is the date that AD 97-25-15 was published in the Federal Register. This section is not restated in this document; therefore, no change to this AD is necessary in this regard.

Correction of Publication

This document corrects the error in paragraph (a) and correctly adds the AD as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13).

The AD is reprinted in its entirety for the convenience of affected operators. The effective date of the AD remains August 17, 2000.

Since this action only corrects a calendar date that was referenced incorrectly, it has no adverse economic impact and imposes no additional burden on any person. Therefore, the FAA has determined that notice and public procedures are unnecessary.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§39.13 [Corrected]

2. Section 39.13 is amended by correctly adding the following airworthiness directive (AD):

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99-NM-75-AD; Amendment 39-11816; AD 2000-14-07]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 727 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 727 series airplanes, that currently requires repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section, and repair, if necessary. That action also provides for an optional modification of the rear spar web that constitutes terminating action for the repetitive inspections. This amendment requires accomplishment of the previously optional terminating action. The actions specified by this AD are intended to prevent cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and could result in an electrical short that could cause a fire.

DATES: Effective August 17, 2000.

The incorporation by reference of Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999, as listed in the regulations, is approved by the Director of the Federal Register as of August 17, 2000.

The incorporation by reference of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, as listed in the regulations, was approved previously by the Director of the Federal Register as of December 29, 1997 (62 FR 65355, December 12, 1997).

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Walter Sippel, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2774; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 97-25-15, amendment 39-10239 (62 FR 65355, December 12, 1997), which is applicable to certain Boeing Model 727 series airplanes, was published in the Federal Register on October 6, 1999 (64 FR 54246). The action proposed to require repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section; repair, if necessary; and modification of the rear spar web, which would constitute terminating action for the repetitive inspections.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Support for the Proposal

One commenter supports the proposed rule.

Request To State Grace Period in Calendar Time

One commenter requests that the FAA revise the grace period in the proposed rule from 3,000 flight cycles to 4 years after the effective date of this AD. The commenter notes that Boeing Alert Service Bulletin 727-57A0182 is listed in Boeing Document D6-54860, dated March 31, 1989, which is currently required by AD 90-06-09, amendment 39-6488 (55 FR 8370, March 7, 1990) and AD 94-05-04, amendment 39-8842 (59 FR 13442, March 22, 1994). The commenter states that these AD's currently state a compliance threshold of 60,000 total flight cycles, with a grace period of 4 years after the effective date of the AD. The commenter requests that the proposed rule allow the same grace period allowed by the existing AD's for the actions specified in Boeing Alert Service Bulletin 727-57A0182.

The FAA does not concur with the commenter's request. Boeing Document D6-54860 addresses service problems related to both corrosion (which is a function of time) and fatigue (which is a function of flight cycles). Although Boeing Alert Service Bulletin 727-57A0182 is listed in that document, this AD is a standalone AD concerned with fatigue cracking of the rear spar web, which is related to flight cycles. As a result, the FAA has determined that a grace period stated in flight cycles is more appropriate than one stated in calendar time. No change to the final rule is necessary in this regard.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 970 Model 727 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 659 airplanes of U.S. registry will be affected by this AD: 641 "Group 1" airplanes and 18 "Group 2" airplanes, as listed in the service bulletin.

The inspection that is currently required by AD 97-25-15 takes approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$79,080, or \$120 per airplane, per inspection cycle.

The new modification that is required in this AD action takes approximately 60 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts cost approximately \$6,434 per airplane for "Group 1" airplanes, and \$6,689 per airplane for "Group 2" airplanes. Based on these figures, the cost impact of the new modification required by this AD on U.S. operators is estimated to be \$6,616,996, or \$10,034 per "Group 1" airplane and \$10,289 per "Group 2" airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-10239 (62 FR 65355, December 29, 1997), and by adding a new airworthiness directive (AD), amendment 39-11816, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

CORRECTION: [*Federal Register: September 8, 2000 (Volume 65, Number 175); Page 54409-54410; www.access.gpo.gov/su_docs/aces/aces140.html]. We published this correction without the superseded AD number in the AD title line. We corrected this copy.*]

2000-14-07 BOEING: Amendment 39-11816. Docket 99-NM-75-AD. Supersedes AD 97-25-15, Amendment 39-10239.

Applicability: Model 727 series airplanes having line numbers 858 through 864 inclusive, 867 through 869 inclusive, 872 through 883 inclusive, and 885 through 1832 inclusive; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and could result in an electrical short that could cause a fire, accomplish the following:

Restatement of the Requirements of AD 97-25-15

Inspections

(a) Prior to the accumulation of 15,000 total flight cycles, or within 300 flight cycles after December 29, 1997 (the effective date of AD 97-25-15, amendment 39-10239), whichever occurs later: Accomplish the inspections specified in either paragraph (a)(1) or (a)(2) of this AD, in accordance with Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. For purposes of the AD, the access panels specified in the alert service bulletin need not be removed; the access panels need only be opened.

Note 2: The fuel tank of the wing center section may be filled with fuel to assist in detecting cracking or fuel leakage during the accomplishment of the visual inspections required by this AD.

(1) Perform a visual inspection using a borescope or mirror to detect cracking of the rear spar

web and/or fuel leakage of the wing center section between right body buttock line (BBL) 40 and left

BBL 40, in accordance with Part I of the Accomplishment Instructions of the service bulletin. Thereafter, repeat this inspection at intervals not to exceed 300 flight cycles. Or

(2) Perform an ultrasonic and high frequency eddy current (HFEC) inspection to detect cracking of the rear spar web of the wing center section between right BBL 40 and left BBL 40, in accordance with Part II of the Accomplishment Instructions of the service bulletin. Thereafter, repeat this inspection at intervals not to exceed 3,000 flight cycles.

Repair

(b) If any cracking of the rear spar web and/or fuel leakage of the wing center section is detected between right BBL 40 and left BBL 40 near the upper machined land radius, prior to further flight, repair in accordance with Part III of the Accomplishment Instructions in Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this repair constitutes terminating action for the repetitive inspection requirements of this AD.

(c) If any cracking of the rear spar web and/or fuel leakage of the wing center section is detected that is outside the area specified in paragraph (b) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

New Requirements of This AD

Modification

(d) Prior to the accumulation of 60,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, accomplish an ultrasonic and HFEC inspection in accordance with the requirements of paragraph (a)(2) of this AD.

(1) If no cracking is detected, prior to further flight, modify the rear spar web of the center section of the fuel tank between right BBL 40 and left BBL 40, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this modification constitutes terminating action for the repetitive inspection requirements of this AD.

(2) If any cracking is detected, prior to further flight, repair and modify the rear spar web in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this modification constitutes terminating action for the repetitive inspection requirements of this AD.

Alternative Methods of Compliance

(e)(1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 97-25-15, amendment 39-10239, are approved as alternative methods of compliance with this AD.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished, provided the limitations specified in paragraphs (f)(1) through (f)(6) of this AD are included in the special flight permit:

"(1) Required trip and reserve fuel must be carried in the No. 1 and No. 3 outer wing tanks.

(2) Wing center tank No. 2 must be empty of fuel.

(3) The fuel system must be checked for normal operation prior to flight by verifying that all boost pumps are operational; configuring the fuel system by turning on all boost pumps in the No.'s 1 and 3 outer wing tanks and by opening all crossfeed valve selectors; and by confirming that fuel is not bypassing tank No. 2 check valves by observing that there is not leakage into tank No. 2.

(4) Maintain a minimum of 5,300 pounds of fuel in tanks No. 1 and No. 3 to prevent uncovering the fuel bypass valve.

(5) The fuel quantity indication system must be operational in all three tanks.

(6) The effects of loading fuel only in the wing tanks on the airplane weight and balance must be considered and accounted for."

Incorporation by Reference

(g) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997; or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999.

(1) The incorporation by reference of Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999, was approved previously by the Director of the Federal Register as of August 17, 2000 (65 FR 43228, July 13, 2000).

(2) The incorporation by reference of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, was approved previously by the Director of the Federal Register as of December 29, 1997 (62 FR 65355, December 12, 1997).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(h) The effective date of this amendment remains August 17, 2000.

Issued in Renton, Washington, on September 1, 2000.

Donald L. Riggin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00-23042 Filed 9-7-00; 8:45 am]

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